

IN THE CLAIMS

Claims 1-44 (canceled)

45. (new) A ballistics calculator system for computing targeting information to hit a target, comprising a processor, said processor comprising: a ballistics computer program for analyzing information to accurately aim a firearm at a target using a target acquisition device with a reticle, said program using information regarding the target acquisition device and reticle being used, wherein said type of target acquisition device and reticle comprises:

- a) a reticle, comprising:
 - 1) a plurality of secondary horizontal cross-hairs at predetermined distances along said primary vertical cross-hair; and
 - 2) a plurality of secondary vertical cross-hairs at predetermined distances along at least some of said secondary horizontal cross-hairs; and
- b) an output using said secondary horizontal cross-hairs and said secondary vertical cross-hairs to identify an aiming point for hitting the target.

46. (new) The ballistics calculator system of claim 45, wherein said reticle further comprises a primary vertical cross-hair and a primary horizontal cross-hair.

47. (new) The ballistics calculator system of claim 46, wherein the said primary vertical and horizontal cross-hairs intersect at the optical center of the said reticle.

48. (new) The ballistics calculator system of claim 46, wherein the said primary vertical and horizontal cross-hairs intersect above the optical center of the said reticle.

49. (new) The ballistics calculator system of claim 46, wherein the said primary vertical and horizontal cross-hairs intersect below the optical center of said reticle.

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50. (new) The ballistics calculator system of claim 45, wherein at least some of said secondary horizontal cross-hairs are evenly spaced.

51. (new) The ballistics calculator system of claim 45, wherein at least some of said secondary vertical cross-hairs are evenly spaced.

52. (new) The ballistics calculator system of claim 45, wherein at least some of said secondary horizontal and vertical cross-hairs have identifying marks.

53. (new) The ballistics calculator system of claim 45, wherein said vertical and horizontal cross-hairs are connected to form a grid.

54. (new) The ballistics calculator system of claim 45, wherein said reticle includes range finding markings on said reticle.

55. (new) The ballistics calculator system of claim 45, wherein said information to accurately aim a firearm at a target further comprises information regarding external conditions.

56. (new) The ballistics calculator system of 55, wherein said information regarding external conditions is selected from one or more of date, time, temperature, barometric pressure, relative humidity, target image resolution, wind-speed, wind direction, hemisphere, latitude, longitude and altitude.

57. (new) The ballistics calculator system of claim 55, wherein at least some of said information regarding external conditions is input to the program using an automated measuring device operably linked to the said processor.

58. (new) The ballistics calculator system of claim 45, wherein said information to accurately aim a firearm at a target further comprises information regarding the firearm being used.

59. (new) The ballistics calculator system of claim 58, wherein said information regarding the firearm being used is selected from one or more of the rate and direction of the barrel twist, barrel length, internal barrel caliber and internal barrel diameter.
60. (new) The ballistics calculator system of claim 58, wherein said ballistics computer program includes automatic input of firearm information by selecting stored rate and direction of barrel twist, barrel length, internal barrel caliber, and internal barrel diameter.
61. (new) The ballistics calculator system of claim 45, wherein said information to accurately aim a firearm at a target further comprises information regarding the projectile being used.
62. (new) The ballistics calculator system of claim 61, wherein said information regarding the projectile being used is selected from one or more of projectile weight, projectile caliber, projectile configuration, propellant type, propellant amount, propellant potential force, powder, primer, one or more ballistic coefficients of the projectile, and the muzzle velocity of the projectile.
63. (new) The ballistics calculator system of claim 61, wherein said ballistics computer program includes automatic input of projectile information by selecting stored projectile information.
64. (new) The ballistics calculator system of claim 45, wherein said information to accurately aim a firearm at a target further comprises information regarding the shooter.
65. (new) The ballistics calculator system of claim 64, wherein said information regarding the shooter is selected from one or more of the shooter's heart rate and rhythm, visual acuity, visual idiosyncrasies, respiratory rate, blood oxygen saturation, muscle

activity, brain wave activity, and number and positional coordinates of spotters assisting the shooter.

66. (new) The ballistics calculator system of claim 45, wherein said information to accurately aim a firearm at a target further comprises information regarding the relation of the shooter and the target.

67. (new) The ballistics calculator system of claim 66, wherein said information regarding the relation between the shooter and target is selected from one or more of the distance between the shooter and target, the speed and direction of movement of the target relative to the shooter, the angle formed between the barrel and an axis perpendicular to the force of gravity, and the direction of fire from true North.

68. (new) The ballistics calculator system of claim 67, wherein said distance between the shooter and the target is less than 100 yards.

69. (new) The ballistics calculator system of 67, wherein said distance between the shooter and target is greater than 100 yards.

70. (new) The ballistics calculator system of claim 67, wherein said distance between the shooter and target is greater than 500 yards.

71. (new) The ballistics calculator system of claim 67, wherein said distance between the shooter and target is greater than 1000 yards.

72. (new) The ballistics calculator system of claim 67, wherein said distance between the shooter and target is greater than 1500 yards.

73. (new) The ballistics calculator system of claim 45, wherein said information regarding the target acquisition device and reticle being used is selected from one or more of type of reticle, power of magnification, plane of function, the positional relationship

between the target acquisition device and the firearm, and the range at which the said target acquisition device was zeroed using said firearm and said projectile.

74. (new) The ballistics calculator system of claim 45, wherein said target acquisition device reticle comprises an aiming point at an intersection of a primary vertical cross-hair and a primary horizontal cross-hair, wherein said ballistics calculator system further provides an output of the number of clicks an elevation knob and a windage knob should be turned to adjust a position of said target acquisition device relative to a firearm such that an intersection of said primary vertical cross-hair and said primary horizontal cross-hair can be used as the aiming point for striking said target.

75. (new) The ballistics calculator system of claim 45, wherein said target acquisition device, comprises:

- a) a housing;
- b) a means for mounting the housing in a fixed, predetermined position relative to a firearm;
- c) a reticle, comprising:
 - 1) a plurality of secondary horizontal cross-hairs at a predetermined distance along said primary vertical cross-hair; and
 - 2) a plurality of secondary vertical cross-hairs at a predetermined distance along at least some of said secondary horizontal cross-hairs.

76. (new) The ballistics calculator system of claim 75, wherein said target acquisition device further comprises an objective lens mounted in one end of said housing.

77. (new) The ballistics calculator system of claim 75, wherein said target acquisition device further comprises an ocular lens mounted in the opposite end of said housing.

78. (new) The ballistics calculator system of claim 75, wherein said target acquisition device further comprises a projected image.

79. (new) The ballistics calculator system of claim 45, wherein said processor is further configured to display information on a display screen.
80. (new) The ballistics calculator system of claim 79, wherein the information displayed is an image of a reticle on said display screen showing a position of said aiming point.
81. (new) The ballistics calculator system of claim 79, wherein the information displayed is a projected image on a reticle showing a position of said aiming point.
82. (new) The ballistics calculator system of claim 79, wherein the information displayed is a virtual image on a reticle showing a position of said aiming point.
83. (new) A method for using the ballistics calculator system of claim 1, comprising:
 - a) inputting information regarding the target acquisition device and reticle being used; and
 - b) selecting one or more aiming points on said ballistics calculator system.